

Remarks

The Applicant has carefully reviewed the Examiner's comments and objections made in the Office Action of July 23, 2007. After review, the Applicant contends that the present claims are allowable as currently presented, and therefore has elected not to amend or in any way change the claims presently standing in this application. Instead, Applicant wishes to carefully review the Official Action being responded to. In order to undertake that review, however, it is necessary first to discuss, once again, what is precisely claimed in independent claim 1, and more particularly to discuss what is not claimed. Then, Applicant will review the Official Action in detail, responding to or refuting nearly all of the allegations made therein.

Rejection under 35 USC 103

Currently Claims 1, 2, 6 to 9, 11, 12, 14 and 17 to 19 are pending in the present application. All of these claims stand rejected under 35 USC 103(a) as being obvious over the cited prior art which was identified in an earlier Official Action. In particular, the claims stand rejected as being unpatentable over Kincs *et al.* (hereinafter "Kincs") in view of Peleg *et al.* (hereinafter "Peleg") and the book "Professional Baking".

It will also be understood, of course, that any discussion which follows hereafter with respect to claim 1 applies equally to claim 11, particularly as to the method steps which effect and replicate the very specifically claimed restrictions which are present in each of claims 1 and 11. It will be seen once again that those claims clearly define over the prior art in whatever combination the Examiner may wish, such as: Kincs and Peleg; Kincs and Peleg and Professional Baking; Peleg and Kincs; Peleg and Kincs and Professional Baking; Professional Baking and Kincs and Peleg; or Professional Baking and Peleg and Kincs.

Of course, as with any obviousness objection, the Examiner has been clear that he does not rely simply on only one of the cited references; nor of course is that possible, but instead relies on a combination of the various cited documents.

Referring specifically to claim 1, the Applicant now reviews each and every one of the constituents of the pie crust mixture of the present invention, and the restrictions as they apply thereto.

● First, the claim teaches that it relates to a **cold-mixed pie crust mixture**. As is seen hereafter, that means that the major constituents of the pie crust mixture are mixed together in a room or other mixing environment which is cold: that is, the temperature is greater than +5°C but less than +20°C.

● Next, the claim teaches that the major constituents of the pie crust pastry formulation are **flour, water, and a frozen oil/fat system**. The claim does not teach, however, a dough formulation at all, which is what all of the claims of the Kincs reference define. Neither does the claim (or, for that matter the entire specification of the present application) teach or require additional major components such as a sweetening component, an egg component, a milk component, and a pelletized shortening, all as required in the Kincs teachings and claims. Claim 1 hereof does teach and require the use of both flour and water. These are, however, the only components that the pastry pie crust mixture of the present invention has in common with the claims and teachings of the Kincs patent.

Kincs is not concerned with low temperature applications for the production of pie crusts. It is to be noted that the only mention of the word "frozen" in the Kincs patent is at column 1, line 16, where a derogatory comment is made with respect to prior art pourable shortening products. Kincs is primarily concerned with the production of a pelletized shortening material, that can be used in the production of dough products. [Please note that this discussion differentiates between "dough" and "pastry". A dough formulation may, and usually does, require the use of yeast or other raising agent, whereas a pastry formulation relies on its fat content for its flaky characteristic. Pastry does not "rise" as would bread, cake, etc. Any person skilled in the art, including the inventors herein and their professional baking colleagues throughout North America, will recognize and agree with such distinctions. Pastry and dough must not be confused one with the other.]

Moreover, the Kincs reference requires that the fat/oil be solid at temperatures of above 12.8 degrees C. This is inherent in the Kincs patent since the partially hydrogenated vegetable oils used by Kincs must be cooled so as to be solidified by a chilling and crystallizing device operating at a temperature of between 12.8 and 35 degrees C. Clearly, the oils used by Kincs must have a freezing and/or pelletizing point (well) above the minimum chilling temperature of

12.8 degrees C. As such, while Kincs may disclose oils such as soybean oil, cottonseed oil, peanut oil, corn oil, or combinations thereof, these materials must be capable of being pelletizable at the desired temperatures. Thus, they do not meet the criteria of the present claim as being oils having a freezing point of between -35 degrees C and +5 degrees C, and therefore, they fall outside of the claims of the present invention.

Further, as for the Peleg patent, the only context in which the word "frozen" is used in the Peleg patent is with respect to frozen pies.

● The claim then requires that there be **absolutely zero hydrogenated fat constituents**. The Kincs reference, on the other hand, requires the use of partially hydrogenated vegetable oil.

● The oil/fat system is **frozen, long chain, naturally occurring oil which must have at least sixteen carbon atoms**. There is no such specific teaching, anywhere in either the Kincs patent, the Peleg patent, or the Professional Baking reference.

● Next, the claim teaches that the naturally occurring oil is **non-winterized, with a freezing point between +5°C and -35°C**. Once again, there is no such teaching in either of the patent references; and it would be unrealistic to expect such kind of teaching in the Professional Baking reference. However, it is noted that winterization of the Kincs oils would not be required since the partially hydrogenated oils used by Kincs are intended to be solid at temperatures well above 12.8 degrees C. Thus, Kincs does not need to be concerned with this aspect. Peleg is also not concerned with winterization of the oil component at the temperatures used by Peleg. As such, only the Applicant specifically teaches that non-winterized oils are to be used.

Also, the claim requires that the frozen oil/fat system **must have a consistency similar to that of pork lard at +4°C**. This is a teaching, and a restriction, which any person who is at all skilled in the art as it relates to professional baking on a large scale, or the person who has at least some knowledge of the physical characteristics of pork lard, will recognize.

● Now we come to learn the requirement that up to 50% of the water constituent, **when it is first mixed at least with the flour constituent, may be shaved, flaked, or finely ground ice**. Once again, there is no such specific teaching, anywhere in either the Kincs patent or in the Peleg patent, nor in the Professional Baking reference, of this specific requirement.

● Finally, and equally as important as the other restrictions and requirements that are discussed above, it must be again stated that the major constituents of flour, water, and the frozen oil/fat system, **must be mixed together either in a room or other environment which has a temperature greater than +5°C but less than +20°C.**

Thus, it is clear that the Kincs, Peleg and Professional Baking references do not provide the skilled artisan with the information necessary to practice the present invention. Accordingly, we come now to a discussion of the allegations and comments, purported statements of fact, and rejections, which are made in the Official Action being responded to.

First, it is alleged by the Examiner on the third line of page 2 of the Official Action, that the Kincs reference discloses a pie crust. In fact, however, it does not! What Kincs discloses and teaches is a pelletized shortening. However, this pelletized shortening is nothing like the frozen fat/oil system of the present invention. While Kincs makes it clear that the pelletized shortening pellets may be used in all kinds of dough formulations such as biscuits, cakes, cookies, pizza crust, rolls, and the like, only in passing does the Kincs document make any reference to pie crusts. This occurs exactly once, at Col. 5, lines 6 to 8. This passing reference, in combination with the many differences noted hereinabove with respect to the differences between the Kincs document and the present invention, would therefore clearly not provide the skilled artisan with the teachings that have been provided by the present invention in respect of pie crust mixture formulations.

For production of the pie crust dough, Kincs only describes production of the dough by combining flour components, sweetening components such as sugar, syrups and artificial sweeteners, egg components, milk components and water, in addition to the pelletized oil/fat components.

Therefore, the key point of the Official Action is fundamentally flawed. The principal allegation made, that the Kincs et al reference discloses a pie crust having the same composition as the present invention, is therefore wrong, and as such, is not well taken when combined with other references. Thus, everything which follows in the Official Action is suspect, or has no relevance whatsoever, because of this fundamental flaw.

Next, though, the Official Action alleges that the purported "pie crust" of Kincs

"comprises flour, water, and a frozen oil system". However, the Kincs dough formulation also requires a sweetening component, an egg component, a milk component, and a shortening component which is pelletized. Thus, the Kincs formulation is significantly different than the formulation of the present invention. Further, the shortening used by Kincs is not frozen, as alleged by the Examiner; it is pelletized, and it is pelletized at a temperature of at least 12.8 degrees C or higher. This pelletization is accomplished by cooling, but also by pressurizing the partially solidified oil by compaction, in order to further solidify the pelletized oil/fat (Col. 3, lines 62 to 67). As such, the Kincs dough is not made of a frozen fat/oil system, but a pelletized oil, and additionally, it requires a number of additional components not found in the Applicant's pie crust formulation.

Further, the Examiner suggests that because the Kincs reference does not teach that the oil is winterized, it therefore must be non-winterized. In addition to the comments made hereinabove, this argument, it is respectfully submitted, is a disallowed conjecture. It is a *non sequitur*. Since Kincs is totally silent on this feature, and is operating with pelletized oil materials at higher formulation temperatures, no conclusions can be raised as to the use or dis-use of winterized oils by Kincs. More importantly, he does not lead the skilled artisan to the specific use of non-winterized oils.

As to the obviousness rejections, it is noted that in order to establish a *prima facie* case of obviousness, "[f]irst, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references, when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." MPEP 2142.

Since Kincs does not specifically disclose the use of non-winterized oils, it cannot be said that Kincs provides all of the claim limitations. As such, this objection is flawed.

It is stated in the Action that "Kincs et al also disclose a process to make pelletized shortening." (emphasis added). The Applicant does agree with portions of this statement. In fact,

this is what the reference is all about; - making a pelletized shortening. The discussion which follows in the Official Action though, has little or nothing to do with the limitations and restrictions that are set forth in either of claims 1 or 11. Indeed, the Official Action even admits that the pellets are used in making dough products which dough comprises other ingredients. As such, it appears that the Examiner is "cherry picking" based on hindsight to the present invention, and as a result is taking words out of context or reading words into context that are not there, so as to arrive at a conclusion which is outside of the teachings of the Kincs document.

In the third full paragraph of page 2 of the Official Action, the Examiner does admit that the specific formulation of the pie crust of claim 1 is not disclosed. The Examiner further notes that Kincs also does not disclose: i) the processing temperature; ii) the temperature of water and flour; iii) the steps of cooling water; iv) the temperature of the solidified fat; and v) mixing the cooled water with lower and the frozen oil/system. In the Applicant's opinion, all that Kincs does disclose is the production of a pelletized shortening material, and that the pelletized shortening material might be used in some dough formulations. There is nothing to suggest to the skilled artisan that the Kincs document might form the basis for modification to the present invention. In fact, in view of the comments made hereinabove, and the comments by the Examiner in the third paragraph, it appears to the Applicant that there is nothing of importance which is taught by Kincs.

Moreover, the next (i.e, last) sentence in that paragraph is not well stated. This sentence states that the Kincs reference is "also silent about the crust having a zero zero [sic] hydrogenated fat constituent". In fact, the Kincs patent refers to "partially hydrogenated" or "hydrogenated" vegetable oil in its teachings of the production of a pelletized shortening (which is actually the subject of the patent) six times: namely at column 1 lines 31 and 32 and line 59; at column 2, line 16; at column 4, line 17; at column 5, line 18; and at column 5, lines 44 and 45. Never is a non-hydrogenated oil/fat suggested or mentioned. As such, Kincs clearly leads the skilled artisan to the use of at least partially hydrogenated materials, and makes no suggestion or provides no motivation for the skilled artisan to use a non-hydrogenated materials.

Again, Kincs fails to teach or suggest the claimed feature of having a non-hydrogenated, frozen fat/oil system used in the production of a cold-mixed pie crust mixture. Accordingly, the

Applicant contends that Kincs provides very little, if any, guidance to the skilled artisan in the production of the cold-mixed pie crust mixtures which are the focus of the present application.

We now turn to a discussion of the Peleg patent, and acknowledge that it does indeed, disclose a pie crust dough. [Note, though, the use of the word “dough”, which implies a mealy pie crust texture rather than a flaky pie crust texture.] The Applicant also notes that at least the Peleg reference is in the same art as the present application; - unlike the Kincs reference. Indeed, the classifications of the two cited patents should be noted, and the classifications of the cited references in those patents should also be noted. They have nothing in common with each other, and only the Peleg reference has anything in common with the present application.

The Official Action conveniently overlooks however, all of the other pie crust dough-required components set forth in the cited passage (in Col. 2) of the Peleg reference. It is respectfully submitted, therefore, that a person skilled in the art, particularly a professional baker, would not refer to the Peleg reference to solve the problem that the present invention solves.

The present application provides a cold-mixed pie crust mixture which must have no hydrogenated fat constituents, it must have oil which is non-winterized, the frozen oil/fat system must have a specific consistency which is well known to professional bakers, namely it must have a similar consistency to that of pork lard at +4°C, it has shaved ice so that up to 50% of the water constituent is in the form of ice, and it must be mixed at a temperature below 20°C and above +5°C.

The Peleg reference is cited in that it discloses a pie crust, a method of making it, and the various components of a pie crust, as shown in Figure 2. However, the Peleg reference discloses that any of the fats which are typically used in a pie crust dough may be used in the formulation being taught therein, including lard and tallow (which are animal fats, not vegetable fats); and also hydrogenated vegetable fats which must have a plastic solid consistency at room temperature. See column 2, at lines 43 to 48. When combined with the Kincs disclosure, Peleg provides no additional information on making a pie crust according to the present invention than using the formulation disclosed by Peleg, and using the pelletized shortening of Kinc.

Peleg is also cited as teaching the use of water chilled to a temperature of 1.6-7.1 degree C to form the dough. However, as discussed hereinbelow, this does not meet the requirement of

the present invention that the water constituent comprise up to 50% of shaved, flaked or finely ground ice.

Further, the Examiner states that the textbook is cited to show that pie dough should be kept cool during mixing and make-up. However, numerous documents described mixing of the pie crust at about 15 degrees C. None of these documents, though, specifically describe the cold mixed formulations of the present invention. As such, the combination of the textbook to the Peleg and/or Kincs document would not lead the skilled artisan to the present invention.

Next, we once again, we turn to an untrue or misleading allegation which is made on page 3 of the Official Action, in that the Kincs patent teaches “[how] to make pie crust”. In fact, Kincs merely teaches how to make pelletized shortening, and how to use that pelletized shortening to produce a dough formulation which might be used in any number of different kinds of baked products, including incidentally pie crusts. Again, it is respectfully submitted that the Examiner is indulging in “cherry picking”, choosing only those words which support the allegations being made, while ignoring the context from which those words have been taken.

Applicant again respectfully urges that there is absolutely nothing in any of the references which would support the statement that “it would have been obvious to one skilled in the art to use any known dough formulation to make the crust”, such as that taught by Peleg; and that it would have been obvious to vary the formulation depending on the type of crust wanted and the flavor and texture desired.

In contrast, the present invention is directed only to a novel cold-mixed pie crust, and the Applicant contends that those skilled in the art who read the specification and who read the claims in light of the specification, will appreciate the novel approach taken herein. It will be realized that as a result of the careful selection of components, the mixture produces a pie crust which is flaky, and which is based on non-hydrogenated, naturally occurring vegetable oils that have not been modified by using winterized oils. By using the formulation of the present invention, the user is provided with a technique to produce a healthy, flaky pie crust using a minimum of food components. The process of the present invention is also well suited for use in an industrialized process for the production of large numbers of pie crusts. It is respectfully submitted that no combination of Kincs, Peleg and the Professional Baking textbook would lead

the skilled artisan to this combination, or, in general, to the process and mixtures taught in the present invention. While Kincs, Peleg and the textbook may provide comments on some components of oil or pie crust formulations, no combination of these documents would provide the teaching or suggestion needed in order to both make the claimed combination and provide a reasonable expectation of success. Only with hindsight to the present invention, could any argument possibly be made that would pick and choice the appropriate teachings necessary to practise the present invention.

As such, the Applicant contends that absent such hindsight, the skilled artisan could review the Kincs, Peleg and textbook references in detail without any reasonable expectation of successfully recreating the Applicant's formulation. As such, the rejection of the claims as being obvious in view of these documents, must fail.

The Official Action continues by alleging again that because the Kincs reference says that the vegetable oil which is used may be "typically partially hydrogenated vegetable oil", the conclusion may be drawn that it does not have to be hydrogenated oil. Well, perhaps so, but perhaps not. It depends on where the reader wants to "cherry pick" the Kincs document. Clearly though, since Kincs wishes to produce a solid, pelletized material, use of a partially or fully hydrogenated material would be preferred.

Again, this conclusion is supported by the passages which have been referred to above. In particular though, the passages that are in column 1 and column 5, make no doubt about it; - the oil must be at least partially hydrogenated. When the Kincs patent was filed in 1996, there was much less concern about the unhealthy aspect of hydrogenated oil, and the Kincs reference must be read in that light. One cannot impute to the person skilled in the art that it would be obvious from reading that reference to totally ignore the teaching of the reference and use non-hydrogenated oil -- that is, to prepare a pie crust formulation which has zero hydrogenated fat constituent. The person skilled in the art would not leap to such a conclusion. Thus, the allegation that such a variation "is fully suggested by Kincs and would have been readily apparent to one skilled in the art" (emphasis added), is, and would be, respectfully disputed by

persons who are, indeed, skilled in the art; namely, the inventor herein and his colleagues in this industry.

To make their pelletized shortening, the Kincs patent first requires molten vegetable oil, and is looking for about 25% to 35% solids after it has been cooled (to an unspecified temperature). [See column 2, lines 27 to 47.] However, a further teaching at lines 62 and 64 of column 2 suggests that the chilling and crystallizing device will have a temperature of about 12.8°C to 35°C. Such teaching simply does not support the allegation that "it would have been obvious to use lower temperature when the oil being processed requires lower temperature to solidify". It is further suggested that the temperature is "a result-effective variable which can be determined by one skilled in the art". The Applicant disagrees with this statement.

The claims specifically require that the frozen oil/fat system must comprise naturally occurring oil which has at least 16 carbon atoms and freezing point between +5°C and -35°C. Once again, it is respectfully disputed that a person skilled in the art would come to any such conclusion.

The Examiner states that knowing the unhealthy aspects of hydrogenated oil, it would have been obvious to replace it with natural oil or non-hydrogenated oil. Clearly though, Kincs is attempting to produce a pelletized oil, and as such, having a hydrogenated oil would be of benefit. There is no reason to expect, that a non-hydrogenated oil would behave in the manner taught by Kincs at the temperatures taught in his application. Because of the lower solidification temperatures of a non-hydrogenated material, even knowing that it was desirable to use non-hydrogenated materials, it would not necessarily allow the artisan to replace the Kincs partially hydrogenated material with a non-hydrogenated material and expect success in the Kincs process. Thus, even if the skilled artisan wanted to use non-hydrogenated materials, there is nothing in the Kincs document or Peleg or textbook document that would allow such a replacement to occur, or all of the other steps necessary to successfully implement this type of change. Absent this teaching, which is found in the present application, the skilled artisan would not be able to provide the pie crust formulations found in the present application.

Further, the present application, as it is published, clearly states at paragraph 19 that it is well known to use of cold water in the preparation of pie crust pastry. However, the application

goes on to state, and the fact is, that the inventors herein have unexpectedly discovered, that if up to 50% of the water constituent comprises ice which may be shaved, flaked, or finely ground, then a better result is achieved. Why? Because the use of ice particles, which by their definition are very small, ensures that there will be less likelihood of oil absorption by the flour constituent. Moreover, there will be less friction between particles of the flour, thus reducing the chance of mealiness in the pastry when it is baked.

Applicant also disputes the conclusion that the phrase “up to 50% of the water constituent” includes 0%. The person skilled in the art will realize that the relevant claim limitation requires that there must be some ice in the water constituent when it is first mixed with at least the flour constituent. The claim clearly requires the presence of some ice, and by its very definition as set forth in the claim, the ice component of the water constituent comprises small particles thereof. This is significantly different than using ice to prepare cool water. The suggestion by the Examiner that using ice to prepare cool water does not in any way teach the skilled artisan that shaved, flaked or finely ground ice must be used.

The Professional Baking reference merely suggests that when water or milk is used, it should be at about 4° C. or colder; and that the pie “dough” should be kept cool at about 15° C. What that says, however, must be read within the context of the article; - which is directed to a person who presumably was a skilled baker, or wished to be, in 1985. There is nothing said about using ice, and the working temperature that is proposed is at the very high end of the claimed temperature range at which the major constituents must be mixed.

As such, the Professional Baking reference, in combination with the Kincs and/or Peleg documents, would not lead the skilled artisan to the present invention.

In summary, therefore, the fact is that the Kincs reference neither discloses a pie crust, nor the method to make a pie crust as is taught and claimed in the present application. The addition either or both of the Peleg or Professional Baking textbook references fail to provide all of the claimed features of the present claims, and thus, fail to provide the necessary modifications to prior art pie crust formulations that are necessary to implement the present invention. The failure of the cited prior art to even suggest or imply that the formulation of the present application could be used, clearly indicates that the present invention is also a non-obvious

improvement over the prior art. As a result, the Applicant contends that the present invention provides a novel pie crust formulation having many desirable features over the prior art, and is not obvious in view of the cited prior art.

Therefore, Applicant respectfully urges that this application must be allowed at the earliest convenience.

Should the Examiner disagree, he is respectfully requested to refer this application to his Supervisor for review.

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